MARYLAND HISTORICAL TRUST DETERMINATION OF ELIGIBILITY FORM

DETERMINATION OF ELIGIBILIT	Y FORM no
operty Name: Bridge No. B007900	Inventory Number: BA-2681
Address: Wise Avenue over Bear Creek	Historic district: yes X no
City: Dundalk, MD Zip Code:	County: Baltimore County
USGS Quadrangle(s): Middle River	
Property Owner: Baltimore County Department of Public Works Ta	ax Account ID Number:
Tax Map Parcel Number(s): Tax Map Number	
Project: Mid-20th Century Highway Bridges of Maryland (1948-1960) Agency:	MD SHA
Agency Prepared By:	
Preparer's Name: Amy Barns URS Corporation	Date Prepared:09/10/2004
Documentation is presented in: Project Review and Compliance Files	
Preparer's Eligibility Recommendation: X Eligibility recommended	Eligibility not recommended
Criteria: X A B X C D Considerations: A B	CDEFG
Complete if the property is a contributing or non-contributing resource to	o a NR district/property:
Name of the District/Property:	**. 1
Inventory Number: Eligible:yes	Listed: yes
Vano Name	Date
ite visit by MHT Staff yes X no Name:	Date:
ite visit by MHT Staff yes X no Name: Description of Property and Justification: (Please attach map and photo)	Date:
	Date:
Description of Property and Justification: (Please attach map and photo) Description The Wise Avenue over Bear Creek Bridge (MIHP # BA-2681, Bridge B-07900) was the communities of Dundalk and Inverness, in Baltimore County. The bridge replace site as a part of post-World War II roadway improvements. The Wise Avenue over E	s constructed in 1948 on Wise Avenue, east of ed an existing 1895 drawbridge located at this Bear Creek Bridge is a six span movable
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Reviewer, National Register Program

NR Eligible: yes 🗶

NR-ELIGIBILITY REVIEW FORM

BA-2681

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teel mill, the largest in the world by the 1950s, to the regional economy.

The Wise Avenue over Bear Creek Bridge is not National Register-eligible under Criterion B, as it is not associated with an individual significant on the local, state, or national level.

The Wise Avenue over Bear Creek Bridge is National Register-eligible under Criterion C on the state level, with the period of significance of 1948, as a notable late example of the bascule bridge type displaying an unusual degree of architectural style. It displays elements of the Streamline Moderne style in its design, making this a late example of this architectural style by the time this bridge was constructed. This bridge is one of three examples of this type constructed in Maryland from 1948 to 1960 and one of two examples of its type constructed in Baltimore County. It is also eligible under Criterion C for its association with its designer, the J.E. Greiner Company, and the associate engineer for the project, McLean Contracting. A six span movable double leaf bascule bridge, it was designed specifically for its site by the J.E. Greiner Company, one of the major bridge design firms for the Maryland State Road Commission in the 20th century. The company designed several bridges for the Maryland State Roads Commission during this period. The bridge retains all of the character-defining elements of its type intact and retains its integrity of location, design, association, setting, materials, workmanship, and feeling.

National Register-eligibility under Criterion D was not investigated as part of this study.

SHA Architectural Historian Anne E. Bruder examined the forms provided by URS Corporation. MD SHA supports the consultant's recommendation for eligiblity.

MARYLA	ND HISTO	DRICAL	TRUST	REVI	EW							
Eligibility r	ecommen	ded		Eli	gibility not recomme	ended						
Criteria:	A	В	C	D	Considerations:	A	В	C	D	E	F	G
МНТ Сот	ments:											
	Reviewer, Office of Preservation Services				on Services	Date						
-	Revie	wer, Na	tional Re	egister	Program	19		Date				

MIHP# BA-2681 Wise Avenue Bridge over Bear Creek Baltimore vic 1943

The Wise Avenue over Bear Creek Bridge (MIHP # BA-2681, Bridge B-07900) is a double-leafed bascule trunnion bridge, built in 1948, that carries Wise Avenue over Bear Creek, east of the communities of Dundalk and Inverness, in Baltimore County. The bridge runs northwest-southeast and carries two lanes of traffic, one in each direction. The bridge spans Bear Creek with a vertical clearance of approximately 14 feet in the boat channel. The bascule span is approximately 91 feet long, while the entire bridge is approximately 429 feet long. The superstructure west of the bascule span consists of a 10 foot high reinforced concrete bearing. The substructure is comprised of two 15-foot-high reinforced concrete piers, each of which is constructed from two concrete piers. The deck of this span is a metal grid. The bascule portion of the span is supported by a 25-foot-high reinforced concrete bearing and a 30-foot-high reinforced concrete bearing with an operator's house. The superstructure east of the bascule span consists of a 10 foot high reinforced concrete bearing. The substructure is comprised of a 15-foot-high reinforced concrete pier, which is constructed from two concrete piers. The deck of this span is a metal grid. A dedication plaque is located at the northeast corner of the bridge. It states "Wise Avenue Bridge A.D. 1948 County Commissioners Baltimore County Maryland Christian H. Kahl, President Bremen A. Trail, John R. Haut J. Fred Offutt, Roads Engineer J.E. Greiner Company, Consulting Engineer McLean Contracting Company, Contractors W.J. Dahle & Son."

The Wise Avenue over Bear Creek Bridge (MIHP # BA-2681, Bridge B-07900) was constructed in 1948 on Wise Avenue, east of the communities of Dundalk and Inverness, in Baltimore County. The bridge replaced an existing 1895 drawbridge located at this site as a part of post-World War II roadway improvements. The Wise Avenue over Bear Creek Bridge is a six span movable double leaf bascule bridge running west to east across Bear Creek. This bridge is one of three examples of this type constructed in Maryland from 1948 to 1960 and one of two examples of its type constructed in Baltimore County.

Maryland Inventory of Historic Properties Form

historic	Wise Avenue E	Bridge over Bear Cree	k			
other	Bridge No. B-0	7900				
2. Location						3.600
street and number	Wise Avenue a	t Bear Creek			10	N/A not for publication
city, town	Dundalk					X vicinity
county	Baltimore Cour	nty				
3. Owner of	Property	(give names and	mailing addres	ses of all own	ers)	
name	Baltimore Cour	nty Department of Pul	blic Works			
street and number	111 W. Chesap	eake Avenue		a	telephone	410-887-3737
city, town	Towson		state	MD	zip code	21204
4. Location	oi Legai D	escription				
courthouse, registry	y of deeds, etc.			lit	er folio	
city, town 5. Primary L	ocation o	7 VOV 100 Tareste 10 VE - 10-10	Data	lib c parcel	47 102	D number
city, town 5. Primary L Contri Contri Deterr Deterr Recor Histori x Other:	buting Resource is buting Resource in buting Resource in mined Eligible for mined Ineligible for ded by HABS/HA ic Structure Reports Statewide Invent	f Additional n National Register D n Local Historic District the National Register/ r the National Register ER rt or Research Report	Data istrict ct Maryland Regi	c parcel	47 102	D number
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7. Description	Inventory No. BA-2681
Condition	
excellent deteriorated	

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Description

x good

fair

ruins

altered

The Wise Avenue over Bear Creek Bridge (MIHP # BA-2681, Bridge B-07900) is a double-leafed bascule trunnion bridge, built in 1948, that carries Wise Avenue over Bear Creek, east of the communities of Dundalk and Inverness, in Baltimore County. The bridge is located in an urban area and is situated on the stretch of Wise Avenue that connects Merritt Boulevard to North Point Boulevard. The bridge receives brisk vehicular traffic.

The bridge runs northwest-southeast and carries two lanes of traffic, one in each direction. Sidewalks carry pedestrian traffic on each side of the bridge. The approach span sidewalks are concrete, while the bascule span sidewalks are metal grid panels. A concrete curb, measuring approximately one foot high, separates the sidewalk from the roadway. This divider is metal on the bascule span. Traffic lights are located at each end of the bridge, along with two automatic traffic arms.

The bridge spans Bear Creek with a vertical clearance of approximately 14 feet in the boat channel. This channel is approximately 75 feet wide and has timber fenders. The bascule span is approximately 91 feet long, while the entire bridge is approximately 429 feet long. Each lane of traffic is approximately 28 feet wide, while each sidewalk is approximately 4 feet wide.

The superstructure west of the bascule span consists of a 10 foot high reinforced concrete bearing. The substructure is comprised of two 15-foot-high reinforced concrete piers, each of which is constructed from two concrete piers. The deck of this span is a metal

The bascule portion of the span is supported by a 25-foot-high reinforced concrete bearing and a 30-foot-high reinforced concrete bearing with an operator's house. All of the bearings are unaltered with vertical scoring and aluminum windows in the operator's house. A metal pipe railing with four horizontal members runs the length of the bridge. The railing terminates into stepped concrete panels at each end of the bridge. These concrete panels feature rounded corners and vertical groove detailing.

The superstructure east of the bascule span consists of a 10 foot high reinforced concrete bearing. The substructure is comprised of a 15-foot-high reinforced concrete pier, which is constructed from two concrete piers. The deck of this span is a metal grid.

Several original metal signs are located on the railing of the bridge. "No Loitering or Swimming" signs are located on the bascule railing on each side and on the railing just to the west of the bascule span on each side. "No Trespassing Violators Will be Prosecuted Baltimore County Department of Public Works" signs are located at the southeast and southwest corners of the bridge. The sign at the northwest corner has been spray painted, while the sign at the northeast corner is missing. A dedication plaque is located at the northeast corner of the bridge. It states "Wise Avenue Bridge A.D. 1948 County Commissioners Baltimore County Maryland Christian H. Kahl, President Bremen A. Trail, John R. Haut J. Fred Offutt, Roads Engineer J.E. Greiner Company, Consulting Engineer McLean Contracting Company, Contractors W.J. Dahle & Son."

The bridge appears to have undergone few alterations aside from regular maintenance and repairs. The concrete deck looks original. In 1971, the bascule piers received underwater repairs by the prepacked intrusion method. In 1976 repairs included removal and replacement of some grating. In 1985 some of the piers received epoxy injections. Currently, plans have been made to replace the bascule deck, and to install new mechanical and electrical elements, which date to the 1940s.

8. Signific	ance			Inventory No. BA-2681
Period	Areas of Significance	Check and ju	stify below	
1600-1699 1700-1799 1800-1899 <u>x</u> 1900-1999 2000-	agriculture archeology architecture art commerce communications community planning conservation	economics education education engineering entertainment/ recreation ethnic heritage exploration/ settlement	 health/medicine industry invention landscape archite law literature maritime history military 	performing arts philosophy politics/government cuture religion science social history x transportation other:
Specific dates	1948		Architect/Builder	Greiner; McLean
Construction da	ates 1948			
Evaluation for:				
x	National Register	M	aryland Register	not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Statement of Significance

The Wise Avenue over Bear Creek Bridge (MIHP # BA-2681, Bridge B-07900) was constructed in 1948 on Wise Avenue, east of the communities of Dundalk and Inverness, in Baltimore County. The bridge replaced an existing 1895 drawbridge located at this site as a part of post-World War II roadway improvements. The Wise Avenue over Bear Creek Bridge is a six span movable double leaf bascule bridge running west to east across Bear Creek. This bridge is one of three examples of this type constructed in Maryland from 1948 to 1960 and one of two examples of its type constructed in Baltimore County.

Historic Background and Support

The North Point peninsula is located to the east of the city of Baltimore and is surrounded by three bodies of water: the Back River to the North, the Chesapeake Bay to the east, and the Patapsco River to the south. The area was sparsely populated with farms until the end of the 19th century when industry came to the area. The first company to establish itself on the peninsula was the Maryland Steel Company, which built a shipyard and steel mill at Sparrow's Point, on the eastern side of Bear Creek in 1889. Housing was built near the shipyard to accommodate workers, as the commute from Baltimore was too difficult for most employees due to the lack of an existing transportation system.

Henry McShane, the owner and founder of the McShane Bell Foundry, moved his company from the city of Baltimore to the western side of Bear Creek in 1893 and an area he named Dundalk. The Baltimore and Sparrow's Point Railroad established a rail line by 1895 to facilitate the transportation of employees and goods to and from both the Sparrow's Point Shipyard and the McShane Bell Foundry. That same year, construction was occurring on a drawbridge across Bear Creek to improve transportation along the North Point peninsula. It is unclear why a drawbridge was selected for this site as there are no known industries or boatyards located north of the bridge location in the 19th century and Bear Creek has no northern outlet. Prior to the construction of the drawbridge and the extension of Wise Avenue from Baltimore along the peninsula, the primary route along the peninsula was State Route 20 which runs parallel to Wise Avenue. The Wise Avenue over Bear Creek Bridge allowed traffic to follow a shorter and more direct route from Baltimore to the peninsula.

In 1896, the U.S. Army established Fort Howard across Bear Creek on the North Point. This military post contained six batteries and was the chief defense and harbor headquarters for Baltimore until 1940.³ The primary route used to reach Fort Howard was State

¹Arnett, et al. Maryland: A New Guide to the Old Line State. 481.

[&]quot;Bethlehem Steel Corporation, Sparrows Point MD Record of Pre-WWII Shipbuilding." http://www.coltoncompany.com/shipbldg/ussbldrs/prewwii/shipyards/bethsparrowspoint.htm

[&]quot;From the Meadows to the Point." http://www.louisdiggs.com/meadows/home.html

² Terri Narrell Mause. "Dundalk's Timeline" Dundalk Eagle. October 20, 2004.

³ "Fort Howard." American Forts Network. http://www.geocities.com/baltforts/Fort_Howard/

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Route 20 and Wise Avenue. The North Point was further developed with the construction of the Bay Shore Amusement Park by the United Railway and Electric Company in 1906.⁴

In 1916, Bethlehem Steel purchased the Maryland Steel Company's Sparrow's Point shipyard and created the Dundalk Company. The Dundalk Company purchased 1,000 acres of land and created the first planned community on the North Point peninsula. As part of the construction, the company built additional housing, community buildings, and a company store adjacent to shipyard for its workers. At this time, the community of Dundalk was formally established and contained 62 homes, two stores, a post office and a telephone exchange. Additional housing was also constructed in Dundalk, close enough for workers to commute by train, to accommodate the increasing workforce of the Sparrow's Point shipyard. By the start of World War II, the shipyard had become the largest employer on the North Point peninsula and had a work force too large to be housed in one location on Sparrow's Point.⁵

The area's population continued to grow during World War I and World War II as the Sparrow's Point shipyard manufactured ships for the war effort. During both wars, the federal government took over the construction of worker housing from Bethlehem Steel. As a result, construction occurred at a rapid pace, with additional residential neighborhoods built on both sides of Bear Creek. After World War II, the Sparrow's Point shipyard continued to grow becoming the largest steel mill in the world and reaching a peak employment of 35,000 workers in 1959. The community of Sparrow's Point accommodated 5,400 people at its peak in 1955, necessitating the construction of additional company-sponsored housing projects on the west side of Bear Creek.

With the continued growth of the shipyard, the construction of additional residential communities for workers further from Sparrow's Point, and the increased availability of the automobile to the middle class, additional roads and bridges were constructed along the peninsula. In 1921, a toll bridge was built connecting Dundalk to Sparrow's Point, bypassing Wise Avenue and State Route 151, though these routes were still heavily trafficked. After World War II, the area's roads were improved and widened by the State Roads Commission due in large part to the importance of the Sparrow's Point shipyard to the regional economy. As a part of this project, Wise Avenue was improved and a new bridge was constructed over Bear Creek in 1948. It is unclear why a bascule bridge was used for the replacement bridge as there was no industry or boatyards located to the north of the bridge and Bear Creek has no northern outlet. It is assumed that the U.S. Army Corps of Engineers had declared Bear Creek to be a navigable waterway beyond this point, requiring that the waterway be accessible to marine traffic and necessitating the construction of a movable bridge on Bear Creek.

The Wise Avenue over Bear Creek Bridge is a six span movable double leaf bascule bridge. Its overall length is 426 feet and it is 41 feet wide, accommodating four lanes of traffic and two pedestrian walkways. Moving from west to east, the bridge is supported by a 10 foot high reinforced concrete bearing, two 15-foot-high reinforced concrete piers, a 25-foot-high reinforced concrete bearing, a 30-foot-high reinforced concrete bearing with an operator's house, a 15-foot-high reinforced concrete pier, and a 10-foot-high reinforced concrete bearing. The bridge also has a concrete post and aluminum pipe railing and a metal grid deck in the bascule portion of the span.⁷

Though the bridge was designed in 1946 and constructed in 1948, it displays elements of the Streamline Moderne style in its design making this a late example of this architectural style by the time this bridge was constructed. The bridge is monochromatic with minimal detailing. The concrete bearings each have two incised strips of vertical lines running almost their entire length and rounded

⁴ North Point State Park History. http://www.homestead.com/northpointstatepark/history.html

⁵ Arnett, et al. Maryland: A New Guide to the Old Line State. 480-482.

Tawanda W. Johnson. "It's like a piece of heaven here' Dundalk residents enjoy the good life in the shadow of Baltimore Baltimore On-line Edition. June 15, 2003.

⁶ Terri Narrell Mause. "Bethlehem Steel has tight ties to Dundalk" Dundalk Eagle. October 20, 2004.

⁷ Wise Avenue over Bear Creek Construction Drawings, (1946)

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corners which are stepped back from the face of the bearing. The operator's house, integrated into one bearing, has wrap-around windows and a flat roof. The open work railing was mostly likely used to add to the overall aesthetic appearance of the bridge and not for any specific engineering or technical purpose.

Bascule bridges, of which the Wise Avenue over Bear Creek Bridge is a late example, became popular in the late 19th century when advances in engineering technology made it feasible to build movable bridges across navigable waterways, replacing ferries and shortening land transportation routes. Movable spans are required for bridge crossing on navigable waterways in order to permit passage of vessels that would otherwise be blocked by insufficient vertical clearance of structures that are either fixed or in the closed position. Movable span bridges are common in urban areas where high-density development make the construction of a high level bridge with elaborate approach ramps unfeasible.

The first movable bridges were swing spans, which were quickly replaced by bascule bridges. Bascule bridges had many advantages over swing spans: They typically had a rapid operation, the center of the water channel was kept clear of piers, and a second bridge could be constructed adjacent to the first where swing spans required the nearby river banks to be kept clear to allow for their rotation. Bascule bridges rotate in a vertical plane around a horizontal axis, like a seesaw. A weight changes the bridge's center of gravity, raising and lowering the bridge deck. The technology allows for the movement of long spans and could leave a waterway almost clear of obstructions.

Bascule bridges are constructed with either a single or double leaf. Single leaf bascules are used for short spans, while double leaf bascules can accommodate a much longer span. Double leaf bascule bridges tend to raise and lower faster than a single leaf version and have smaller counterweights and part's as they evenly split the span into two smaller and lighter segments.

The first bascule bridge was completed in Chicago in 1893 and used a patented rolling lift designed by William Scherzer, in which a large overhead counterweight changes the bridge's center of gravity, rotating the center point along a grooved horizontal track. The early decades of the 20th century were dominated by designs patented by Scherzer and others, including Brown, Rall, Schinke, and Strauss, who fabricated their designs in numerous shops, many of which are no longer in existence. Between 1873 and 1924, 78 patents were issued for movable span designs and mechanisms.

The simple trunnion, or Chicago Type Bascule, was designed by the City of Chicago; the first bridge of this type was completed in 1902. In this type of bascule bridge, the bridge rotates around a fixed point, known as the trunnion, located at the leaf's center of gravity. The trunnion supports the entire weight of the bridge when it is moving or open. The counterweight is attached to the end of the leaf and is normally located within a bridge support that then lowers into a pit. The trunnion-type bascule became the most common type of bascule bridge constructed, due in part to the fact that it fixed many of the problems found in a rolling lift design and that the original design by the City of Chicago was never patented, though some bridge designers patented their own versions of this bridge type. By the 1940s, almost all of the various bascule bridge designs were in the public domain and new versions of this bridge type were not patented. 10

⁸Delaware's Historic Bridges, 87-88.

Rita Suffness, "Movable Span Bridges of Maryland," (1992), 3.

⁹ Delaware's Historic Bridges, 90-92.

[&]quot;Movable Span Bridges of Maryland," (1992), 5-6.

¹⁰ Ibid.

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According to Spero in her report on Maryland bridges, 20 working movable bridges were extant in the state in 1993. The majority of these bridges were constructed between 1900 and 1940 in Tidewater locations around the Chesapeake Bay. Construction of bascule bridges declined after World War II and most examples of this type were replaced with large, high level bridges.

The Wise Avenue over Bear Creek Bridge was designed specifically for this site by the J. E. Greiner Company for the Maryland State Road Commission in 1946. The J.E. Greiner Company was established in 1908 in Baltimore, Maryland by John Edwin Greiner who had previously designed railroad bridges. Greiner and associate Hershel Heathcote Allen designed several major bridges for the Maryland State Roads Commission, including the Governor Harry W. Nice Memorial Bridge on MD 301 and the first Chesapeake Bay Bridge on US 50. The company was noted for not using standardized designs for their bridges, instead adapting each to its location and prevailing design styles. Along with providing bridge designs, the J.E. Greiner Company also helped to develop planning documentation for the Commission, including the 1938 report *Maryland's Primary Bridge Program* which established the basis for determining major bridge locations in the state.

The consulting engineer for the project was the McLean Contracting Company, a Glen Burnie, Maryland firm established by Colin McLean in 1903. McLean Contracting was primarily involved in the construction of bridges for the Maryland State Road Commission in the Tidewater region of Maryland. The company was involved in the construction of the MD Route 50 Bridge over Assawoman Bay, the Kent Narrows Bridge, the Naval Academy Bridge in Annapolis, and the South River Bridge in Edgewater.

The Wise Avenue over Bear Creek Bridge is one of three examples of this type constructed in Maryland from 1948 to 1960 and one of two examples of its type constructed in Baltimore County. 12

¹¹ Spero, P.A.C., & Company, Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report, 1995, 101-102.

MDSHA Table of 1948-1960 Bridge Statistics. Unpublished.
MDSHA Table of Bridges by Type and Year. Unpublished.

9. Major Bibliographical References

Inventory No. BA-2681

See Continuation Sheet

10. Geographical Data						
Acreage of surveyed property _ Acreage of historical setting						
Quadrangle name	Middle River, MD	Quadrangle scale:	1:24,000			

Verbal boundary description and justification

The Wise Avenue Bridge carries Wise Avenue over Bear Creek. The bridge is situated on the stretch of Wise Avenue that connects Merritt Boulevard to North Point Boulevard. The bridge has been associated with this site since its construction.

11. Form Prepared by

name/title	Amy V. Barnes / Mary E. Crowe and Stan Popovich		
organization	URS Corporation / Hardlines Design Company	date	October 2004
street & number	200 Orchard Ridge Drive / 4608 Indianola Avenue	telephone	301-258-9780 / 614-784-873
city or town	Gaithersburg / Columbus	state	MD / OH

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to:

Maryland Historical Trust DHCD/DHCP 100 Community Place Crownsville, MD 21032-2023 410-514-7600

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<u>Baltimore County Department of Public Works</u>, County Office Building, 111 W. Chesapeake Avenuve, Suite 307, Towson MD 21204, 410-887-3737

City of Baltimore, Office of Transportation, 417 East Fayette Street, Baltimore MD 21202, 410-396-6802.

Maryland Historical Trust Library, Crownsville - Inventory of Historic Places, National Register Nominations, Determinations of Eligibility, Cultural Resource Reports

Maryland State Archives, Annapolis - photographs from the Sarikas Collection and materials published by the State Roads Commission

Enoch Pratt Library (Maryland Room), Baltimore - vertical files dealing with Maryland bridges

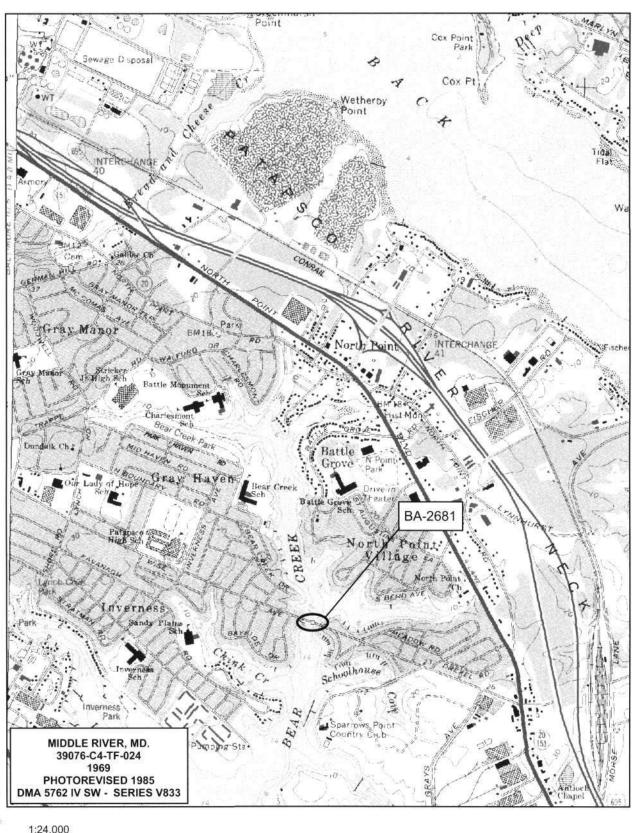
Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. BA-2681

Name Bridge No. B-07900, Wise Avenue Bridge over Bear Creek Continuation Sheet

Number 9 Page 2

<u>Library of Congress</u>, Washington, DC - General information on bridges and additional Maryland bridge material <u>New Jersey State Library</u>, Trenton - Engineering News-Record on microfilm <u>New York Public Library</u>, (Science, Business, and Industry Library), New York - Additional SHA annual reports



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MIHP # BA-2681 Bridge B-07900 Wise Avenue over Bear Creek Baltimore Baltimore County Middle River, MD. Quadrangle



MIHO = BR- 238 Bridge & B-07900, Wise Ruenne over Bear Creek Baltimore County mo Photographer Stan Popovich, Hardines Design Company Date: 6/0/03 Location of Negative: MD SHPO looking west down bridge deck 1/11



WIHLA BY-5981 Bridge = B-07900, Wise Avenue over Bear Creek Baltinus County, MD Photographer Stan Forench, Hard has Design Company Date 1 6/10/03 Location of Negatives : 110 STPO lodling east down bridge deck 2/11



MIHP # BR-2631 Bridge & B-07900, Whie Avenue over Bear Creek Baltimore County Mr Photographer: Stan Popovich, Hardines Design Company Date : 6/10/03 Cocation of Negative: MD Stipo looking southeast down wage deck



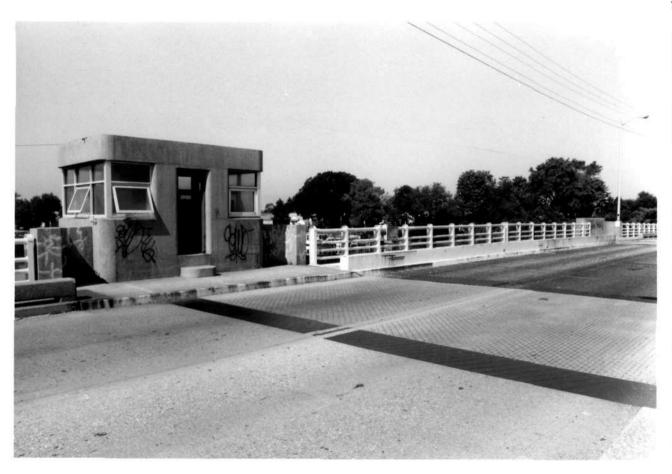
MIHP # BA-2681 Bridge # B-07900, Wise Rienue over Bear Creek Baltimore County, mo Photographe: Stan Popovich, Hardines Design Conqueny Dote: 6/10/03 Location of Legative! MD SHIPO looking north sest at south execution 4/11



MIHD & BR-2381 Bridge = B-07900, Dise Avenue over Bear Creek Baltimore County, MO Photographer: Stan fopovids, Hardines Design Company Dote: 6/0/03 Location of Degative: MI STFD 160 king nor west at south elevation. 5/11



MIHP # BA-2681 Bridge # B-07409 Wise Denne over Bear Greek Baltimore County MD Photographer: Stan Popovich Herdines Design Company Date: 6/10/03 Location of Regative: M SPPO looking northwest at macule span 6/11



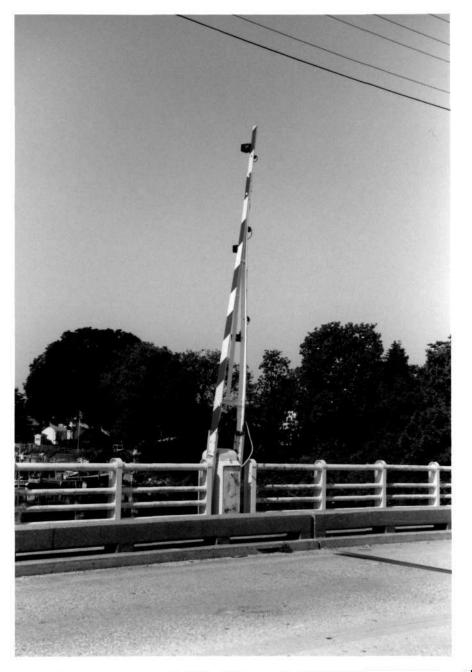
MIHP # EN-2681 Bridge # B-87900 Wise Luenue over Bear Creek Balting & County MI Photographer San Foperich, Mardines Design Company Date: 6/10/03 Location of Negatives, mostine looking southwest of control tower and bascule span dock



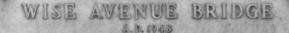
MIHP# BA-2681 Bridge # B-07900, Wise Alenue over Bear Creek faltimere County MO Photographer: Stan fopourch, Hardlines Design Company Location of Marchies MOSHPO looking south at control ower 8/11



MIHP# BA-2681 Bridge # B-07900, Wise Duenue over Boar Creek Balting County MO Photographer Stan Popula, Hardlines Design Company Date: 6/10/03 Location of Negatures in SHAD looking southwest down south railing of bridge 9/11



MIHP# BR-2681 Bridge # B-07900, Wise Nienus over Bear Creek Baltimore County 111 Photographic that Hovich Hardines Design Company Date: 6/10/03 Location of regatives: IN Stro detail of traffic irm 10/11



COUNTY COMMISSIONERS DELIGIOUS GUENT MADVALUE GUESTIAN II. KARL. PRESIDENT BUENEN A. WARL. JOHN M. HAUT

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MIHF= BA-2681 Bridge # B-07900, Wise Denue over Boar Creek Baltimore County IMP Photographer: Stan Popolich, Hardlines Design Company Date: 6/10/03 Location of Digatives, MC SHIPO detail of plague at northeast corner 14/11